ज्ञानेन प्रकाशते जगत्

INDUS UNIVERSITY

INDUS INSTITUTE OF TECHNOLOGY & ENGINEERING

Constituent Institute of Indus University

B.Tech. Semester:	V	Branch:	CE/IT/CSE
MID SEM EXAMINATION SEPTEMBER 2022			
Subject Code:	CE0518	Subject Name:	Computer Networks
Date:	13.9.2022	Time:	90 Mins
Day:	Tuesday	Total Marks:	40

Instructions:

1. Figures to the right indicate full marks.
2. Make Suitable assumptions wherever necessary & indicate.

Q.1	(a)	What is network topology? Explain different types of network topologies.	05
	(b)	Compare and explain the pure ALOHA and slotted ALOHA system.	05
	(c)	Explain Manchester encoding for the bit stream 1001110100.	05
Q-2	(a)	Draw the OSI reference model. Explain the functionality of each layer in brief.	05
		OR	
	(a)	Explain functionality of Repeater, HUB, Bridge, Switch, Router and Gateway.	05
	(b)	Compute CRC for a data sequence 10110111 for which the generator is 110011.	05
		OR	
	(b)	Draw the structure of data link layer frame with suitable diagram.	05
Q-3	(a)	Discuss different types of guided and unguided media used to transmit data in network.	05
		OR	
Q-3	(a)	Explain Binary back off algorithm.	05
Q-3	(b)	Explain sliding window protocol.	05
Q-3	(c)	Compute the hamming code for the given data bits 00111001.	05